CRF Eners Corrected by th STIC System ranch Crir Processing Date: 09 1899,6340 Serial Numb r:_ (STIC staff) Verified by: Changed a file from non-ASCII to ASCII Changed the margins in cases where the sequence text was "wrapped" down to the next line. Edited a format error in the Current Application Data section, specifically: Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ____ the prior application data; or ___ other _____ Added the mandatory heading and subheadings for "Current Application Data". Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer. Changed the spelling of a mandatory field (the headings or subheadings), specifically: Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place. Inserted colons after headings/subheadings. Headings edited included: Deleted extra, invalid, headings used by an applicant, specifically: Deleted: Inon-ASCII "garbage" at the beginning/end of files; secretary initials/filename at end of file; page numbers throughout text; fother invalid text, such as "Unknown" in all Ad-Rical / Unknown entries "OTHER INFORMATION: " IM Seq. 2 Inserted mandatory headings, specifically: __ Corrected an obvious error in the response, specifically: Edited identifiers where upper case is used but lower case is required, or vice versa. Corrected an error in the Number of Sequences field, specifically: A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted. Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a Patentin bug). Sequences corrected: _ Inserted hard return in front of LZZO7 in feg. 2 Other: *Examiner: The above corrections must be communicated to the applicant in the first Office

Action. DO NOT s nd a copy of this form.



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/899,634C

DATE: 01/10/2003 TIME: 10:01:43

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/899,634C TIME: 10:01:43

DATE: 01/10/2003

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		l> LE															
		2> TY) 1												
		3> OF			7 ×+ i	fici	2.1										
)> FE			ALUI	.1101	Laı										
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)> SE				LON.	ue i	ıca p	0101	LIIE (MI						
						Cue	Pho	Val	Lou	Lou	Cuc	C1 17	Wal	ת 1 ת	Λcn	Lou	
223		111 CI	J, C U	LC U	Беи 5	Cy3	T 116	VOI	ш¢и	10	Cys	GIY	val	лта	15	πeα	
		Ara	Ser	T.e.11	-	Tla	Thr	Thr	Pro		Gla	Me+	Tla	Glu		ΛΙα	
227	1111	1119	JUL	20	JCI	1 L C	1111	TIIL	25	GIU	GTII	1760	116	30	пуз	ura.	
	Lvs	Glv	Glu		Δla	Tur	I.e.u	Pro		Δra	Pho	Thr	T.e.u		Pro	Glu	
231	دبرند	O ± y	35	1111	2 3 L CI	- A -	⊥eu	40	∪y3	Arg	LIIG	1111	45	эту	110	GIU	
	Asn	Gln		Pro	I.e.11	Asn	Tla	Glu	Ψкъ	T.611	T.e.ii	Ser		Δ 1 =	Aen	Asn	
231	, rob	-111	- $ y$	110	u	235P	1 T C	JLU	175	шeu	шeu	DET	110	пта	r2b	tio11	

RAW SEQUENCE LISTING DATE: 01/10/2003 PATENT APPLICATION: US/09/899,634C TIME: 10:01:43

Input Set : A:\ptodc.txt
Output Set: N:\CRF4\01102003\I899634C.raw

235		50					55					60					
	Gln		Val	Asp	Gln	Val		Ile	Leu	Tvr	Ser		Asp	Lvs	Ile	Tvr	
239		2		1		70		_			75	1	P	-1-		80	
	Asp	Asp	Tvr	Tvr	Gln	Asp	Leu	Lvs	Glv	Ara		His	Phe	Thr	Ser		
243			- 4 -	- 1	85	T.		-1-	1	90					95		
246	Asp	Leu	Lvs	Ser	Glv	Asp	Ala	Ser	Tle		Val	Thr	Asn	Len		Len	
247			-10	100	011				105				71011	110	0111	шеа	
	Ser	Asp	Ile		Thr	Tvr	Gln	Cvs		Val	Lvs	Lvs	Ala		Glv	Val	
251			115	1		- 1 -		120					125	110	017	• 42	
	Gly	Asn		Lvs	Ile	Gln	Leu		Val	Len	Len	Lvs	_	Ser	Glv	Thr	
255		130	-1-	-1-			135			204	200	140	110	002	019	1111	
	Arg		Tvr	Val	Asp	Glv		Glu	Glu	Tle	Glv		Asp	Phe	Lvs	T.e.ii	
	145	0,70	-] -		1101	150	001	01.4	Olu	110	155	71517	mp	1110	цуз	160	
	Lys	Cvs	Glu	Pro	T.vs		Glv	Ser	Len	Pro		T.A.1	Тиг	Glu	Trn		
263	Lys	Oyo	Oiu	110	165	GIU	Ory	DCI	цси	170	шеи	цец	тут	Giu	175	GIII	
	Lys	T.e.11	Ser	Asn		Gln	Luc	T.611	Pro		Lau	Фrn	Lou	λla		Mot	
267	БуО	пси	DCI	180	JCI	OIII	цуз	пец	185	1111	пец	тър	neu	190	GIU	Met	
	Thr	Sar	Pro		Tlo	Sar	U = 1	Lve		ЛΊэ	Sor	Thr	Clu		Cor	C1	
271	1111	261	195	vaı	TTE	Ser	vai	200	ASII	Ата	ser	Till	205	ıyı	ser	GTY	
	Th.∽	Т~		Cvic	Th∽	17-7	T		7\ ~~ ~	77-1	C1	C - 10		C1-	C	τ	
275	Thr	210	Ser	Cys	1111	Val	Lys 215	ASII	Arg	vaı	СтУ		Asp	GIII	Cys	Leu	
	T 011		T 011	7\ ~~	1701	17.07		D	C	7	7)	220	C1	m1	T1 -	7.7 -	
	Leu 225	Arg	ьeu	Asp	val	230	PIO	PIO	ser	ASII		Ата	СΤΆ	IIII	тте		•
		ח ז ה	Val.	Tlo	C1		T 011	T 0	71.	т	235	τ	т1_	C1	T	240	
283	Gly	мта	val	тте	245	vaı	ьеи	ьeu	Ala		vai	ьeu	iie	стА		TTE	
	т1.	Dho	Cura	C	_					250					255		
287	Ile	rne	Cys	260	AIG												
	<210)	יר דו														
	<211																
	<212				790												
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	<213				ALC.	LIICI	.aı										
	<220 <221				CDC												
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	<222							1 1 .				- 07.1	,				
	<223 <400					LION	Luı	тт те	enger	ı poı	CTHE	e CAR	<				
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	atg																48
	Met	Ald	ьеи	ьeu		Cys	Pne	vai	Leu		Cys	стА	vaı	Ата		Leu	
304				4-4	5					10					15		
306	acc	aga	agt	ttg	agt	atc	act	act	cct	gaa	cag	atg	att	gaa	aag -	gcc	96
	Thr	Arg	Ser		Ser	тте	Thr	Thr		GLu	GIn	Met	lle		ГÀЗ	Ala	
308				20					25					30		•	
	aaa																144
	Lys	GTA		Thr	Ala	Tyr	Leu		Cys	Arg	Phe	Thr		Gly	Pro	Glu	
312			35					40					45				
314	gac	cag	ggg	ccg	ctg	gac	atc	gag	tgg	ctg	ctg	tca	cca	gct	gat	aat	192
	Asp		Gly	Pro	Leu	Asp		Glu	Trp	Leu	Leu		Pro	Ala	Asp	Asn	
316		50					55			•		60					
318	cag	aag	gtg	gat	caa	gtg	att	att	tta	tat	tct	gga	gac	aaa	att	tat	240

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/899,634C TI

DATE: 01/10/2003 TIME: 10:01:43

Input Set : A:\ptodc.txt

Output Set: N:\CRF4\01102003\1899634C.raw

319 320	Gln 65	Lys	Val	Asp	Gln	Val 70	Ile	Ile	Leu	Tyr	Ser 75	Gly	Asp	Lys	Ile	Tyr 80	
322	gac	gac	tac	tac	caa	gat	cta	aaa	ana	cga	αta	cat	+++	aca	ant	aat	288
																	.200
	Asp	ASP	ıyı	тÀт		ASP	ьeu	гуу	GIY		vai	HIS	Pne	Inr		Asn	
324					85					90					95		
326	gat	ctc	aaa	tca	ggt	gat	gca	tca	ata	aat	gta	aca	aat	cta	cag	ttg	336
	Asp																
328	-		-	100	-	-			105					110	_		
	tca	aat	a++		202	t = t	CaG	+ 00		a+a	222	229	act		aat	~++	384
																	304
	Ser	ASP		GTA	THE	Tyr	GIN		ьys	vai	гàг	гàг		Pro	GTA	vaı	
332			115			•		120					125				
334	gga	aat	aag	aag	att	cag	ctg	aca	gtt	ctt	ctt	aag	cct	tca	ggt	aca	432
335	Gly	Asn	Lys	Lys	Ile	Gln	Leu	Thr	Val	Leu	Leu	Lys	Pro	Ser	Gly	Thr	
336		130	_	-			135					140			-		
338	aga	tat	tat	att	at	aaa		gaa	gaa	att	aaa		aac	+++	222	cta	480
	Arg																400
		Cys	тут	vaı	Asp		ser	GIU	GIU	тте	_	ASII	ASP	rne	ьуѕ		
	145					150					155					160	
	aaa																528
343	Lys	Cys	Glu	Pro	Lys	Glu	Gly	Ser	Leu	Pro	Leu	Leu	Tyr	Glu	Trp	Gln	
344					165					170					175		
346	aaa	ttq	tcc	aat	tca	caq	aaσ	cta	ccc	acc	tta	taa	tta	αca	gaa	atσ	576
	Lys																
348	270	200		180	001	0111	130	пса	185	1111	пси	110	пси	190	OLU.	ricc	
	20+	+ ~ ~	+								44-	4			4		604
	act																624
	Thr	Ser		Val	He	Ser	Val		Asn	Ala	Ser	Thr	Glu	Tyr	Ser	Gly	
352			195					200					205				
354	aca	tac	agc	tgt	acc	gtg	aaa	aac	aga	gtg	ggc	tct	gat	cag	tgc	ctg	672
	Thr																
356		210		-			215		,		_	220	*				
	ctt		cta	ast	ata	att		cct	+ 0 3	22+	202		~~~	202	a++	~~~	720
																	720
	Leu	Arg	ьеu	ASP	vaı		PIO	PIO	Ser	ASII	_	Ата	СТА	Inr	тте		
360						230					235					240	
	gga																768
363	Gly	Ala	Val	Ile	Gly	Val	Leu	Leu	Ala	Leu	Val	Leu	Ile	Gly	Leu	Ile	
364					245					250				_	255		
366	gtg	ttt	tac	tat	cat	aaa	aag	cac	aga	gaa	gaa	aaa	tac	gaa		gaa	816
367	Val	Phe	Cvs	Cvs	Hie	Lve	Luc	Ara	Δra	Glu	Glu	Tyc	Tur	Clu	Tuc	Clu	010
368	VUL	THE	Cys		1113	цуз	цуз	Arg		GIU	Giu	Буз	тут		nys.	Giu	
				260	٠.				265					270			
	gtg																864
371	Val	His	His	Asp	Ile	Arg	Glu	Asp	Val	Pro	Pro	Pro	Lys	Ser	Arg	Thr	
372			275					280					285				
374	tcc	act	qcc	aga	aqc	tac	ctc	qqc	agc	aac	cac	tca	tcc	cta	σσα	tcc	912
	Ser																
376		290		- 5		- 1 -	295	1				300			1		
	a+~		ac+	+ ~ ~	222	a + ~		~~~	+ ~ +	+ ~ ~	~~~			+			0.00
270	atg	0-	D	0-	adC	alg	yda	ggc	ldī T	rcc	aag	act	cag	cat	aac -	cag	960
	Met	ser	Pro	Ser	Asn		GLu	GTÀ	Tyr	Ser		Thr	GIn	Tyr	Asn		
380						310					315					320	
382	gta	cca	agc	gaa	gac	ttt	gaa	cgc	gct	cct	cag	agt	cca	act	ctc	ccg	1008
383	Val	Pro	Ser	Glu	Asp	Phe	Glu	Arg	Ala	Pro	Gln	Ser	Pro	Thr	Leu	Pro	

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/899,634C

DATE: 01/10/2003 TIME: 10:01:44

Input Set : A:\ptodc.txt

Output Set: N:\CRF4\01102003\I899634C.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/899,634C

DATE: 01/10/2003 TIME: 10:01:44

Input Set : A:\ptodc.txt

Output Set: N:\CRF4\01102003\I899634C.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:399 M:283 W: Missing Blank Line separator, <220> field identifier

09899634

OIPE

Does Not Comply Corrected Diskette Needed

RAW SEQUENCE LISTING DATE: 12/31/2002 PATENT APPLICATION: US/09/899,634C TIME: 13:42:27

Input Set: A:\20010608 pCAR and its uses seq 1 to seq id 12.ST25.txt

Output Set: N:\CRF4\12312002\1899634C.raw

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3 <110> APPLICANT: Thomas Buhler; Reto Andreas Gadient; Reinhard Korn; Rao Movva
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5 <120> TITLE OF INVENTION: pCAR and its uses

7 <130> FILE REFERENCE: 4-31499A

C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/899,634C

C--> 9 <141> CURRENT FILING DATE: 2002-12-09

9 <160> NUMBER OF SEQ ID NOS: 12

11 <170> SOFTWARE: PatentIn version 3.1

adalete (global) ERRORED SEQUENCES - Went wand return here 212 <210> SEQ ID NO: 2 213 <211> LENGTH: 261 214 <212> TYPE: PRT C--> 215 <213> ORGANISM: (Artificial/Unknown) 220> FEATURE: W--> 216 <220> FEATURE: 216 <223> OTHER INFORMATION: OTHER INFORMATION:) delta porcine CAR E--> 218 <400> SEQUENCE: 2 -delete 220 Met Ala Leu Leu Cys Phe Val Leu Leu Cys Gly Val Ala Asp Leu 224 Thr Arg Ser Leu Ser Ile Thr Thr Pro Glu Gln Met Ile Glu Lys Ala 25 228 Lys Gly Glu Thr Ala Tyr Leu Pro Cys Arg Phe Thr Leu Gly Pro Glu 232 Asp Gln Gly Pro Leu Asp Ile Glu Trp Leu Leu Ser Pro Ala Asp Asn 55 236 Gln Lys Val Asp Gln Val Ile Ile Leu Tyr Ser Gly Asp Lys Ile Tyr 75 240 Asp Asp Tyr Tyr Gln Asp Leu Lys Gly Arg Val His Phe Thr Ser Asn 8.5 90 244 Asp Leu Lys Ser Gly Asp Ala Ser Ile Asn Val Thr Asn Leu Gln Leu 105 248 Ser Asp Ile Gly Thr Tyr Gln Cys Lys Val Lys Lys Ala Pro Gly Val 120 252 Gly Asn Lys Lys Ile Gln Leu Thr Val Leu Leu Lys Pro Ser Gly Thr 135 256 Arg Cys Tyr Val Asp Gly Ser Glu Glu Ile Gly Asn Asp Phe Lys Leu 257 145 150 260 Lys Cys Glu Pro Lys Glu Gly Ser Leu Pro Leu Leu Tyr Glu Trp Gln 165 170 264 Lys Leu Ser Asn Ser Gln Lys Leu Pro Thr Leu Trp Leu Ala Glu Met 180 185 268 Thr Ser Pro Val Ile Ser Val Lys Asn Ala Ser Thr Glu Tyr Ser Gly

RAW SEQUENCE LISTING

DATE: 12/31/2002

PATENT APPLICATION: US/09/899,634C

TIME: 13:42:27

Input Set : A: $\20010608$ pCAR and its uses seq 1 to seq id 12.ST25.txt

Output Set: N:\CRF4\12312002\1899634C.raw

269	195	200	205	
272 Thr Tyr	Ser Cys Thr	Val Lys Asn Arg	Val Gly Ser Asp Gl	n Cys Leu
273 210		215	220	
276 Leu Arg	Leu Asp Val	Val Pro Pro Ser	Asn Arg Ala Gly Th	r Ile Ala
277 225		230	235	240
280 Gly Ala	Val Ile Gly	Val Leu Leu Ala	Leu Val Leu Ile Gl	y Leu Ile
281	245		250	255
284 Ile Phe	Cys Cys Arg			
285	260			

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/899,634C
DATE: 12/31/2002
TIME: 13:42:28

Input Set : A:\20010608 pCAR and its uses seq 1 to seq id 12.ST25.txt

Output Set: N:\CRF4\12312002\I899634C.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:5,6,7,8,9,10,11,12

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/899,634C

DATE: 12/31/2002 TIME: 13:42:28

Input Set: A:\20010608 pCAR and its uses seq 1 to seq id 12.ST25.txt

Output Set: N:\CRF4\12312002\I899634C.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:16 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1 L:215 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2

L:216 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2

L:218 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:2 L:291 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3 L:396 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4

L:397 M:283 W: Missing Blank Line separator, <220> field identifier L:397 M:256 W: Invalid Numeric Header Field, <220> has non-blank data